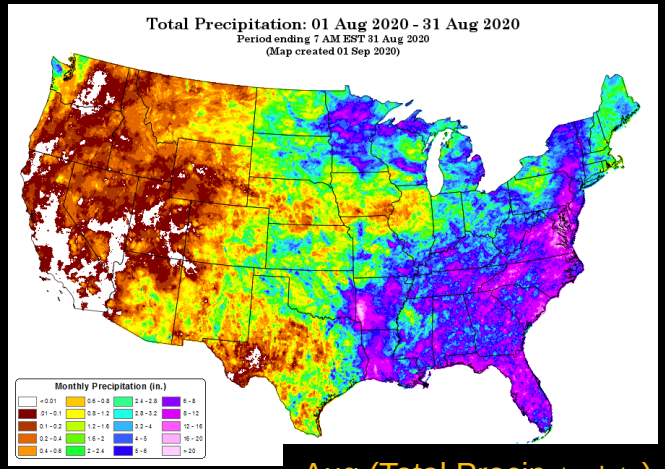
NATIONAL FUELS & FIRE DANGER BRIEFING

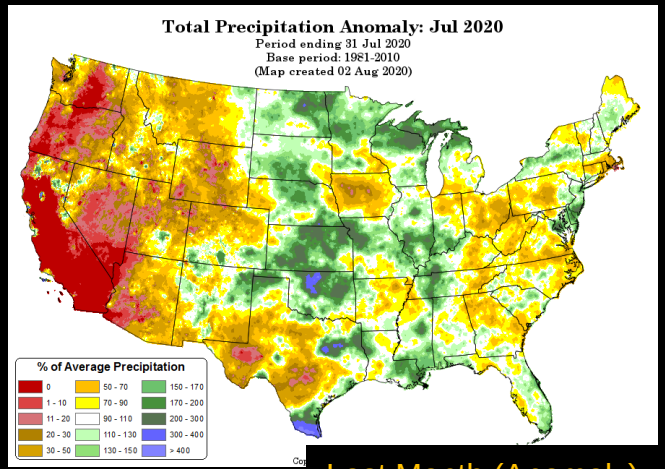
PREDICTIVE SERVICES

09/01/2020

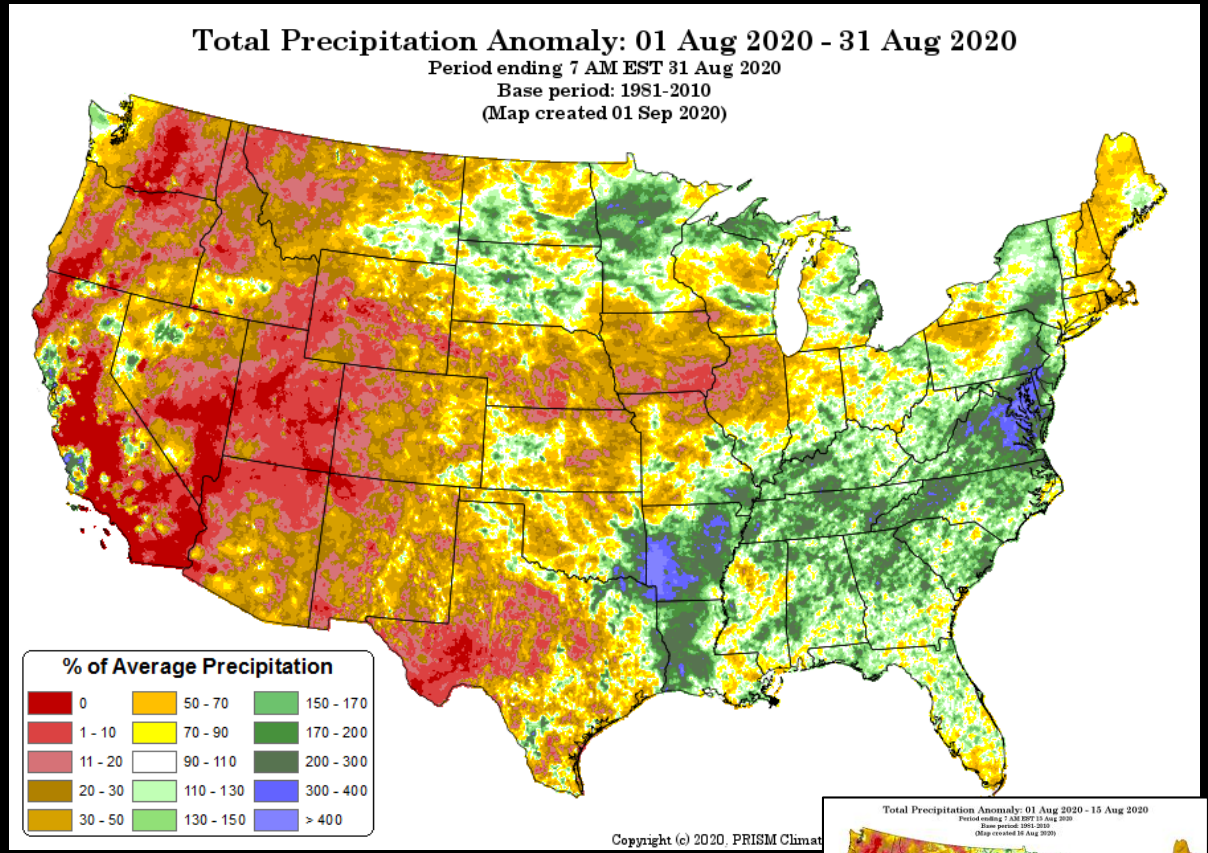
Monthly Precipitation (to date)



Aug (Total Precip; to date)



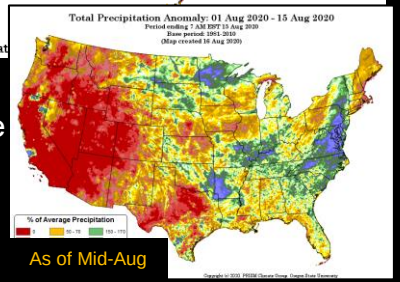
Last Month (Anomaly)



August continued to be very dry across the West. Some areas' deficits improved over the last 2 weeks, but coverage wasn't widespread or sustained. Parts of W TX, S NV, CA, SW OR, & C/N WA haven't seen precip in over 2 months.

09/01/2020

Source: PRISM Climate Group (OSU) Link



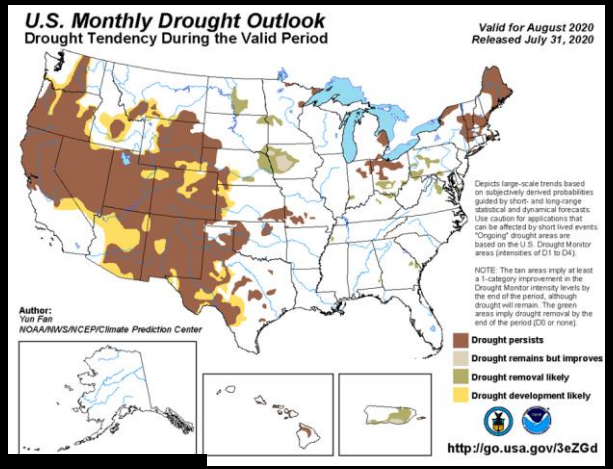
As of Mid-Aug

Drought Outlook

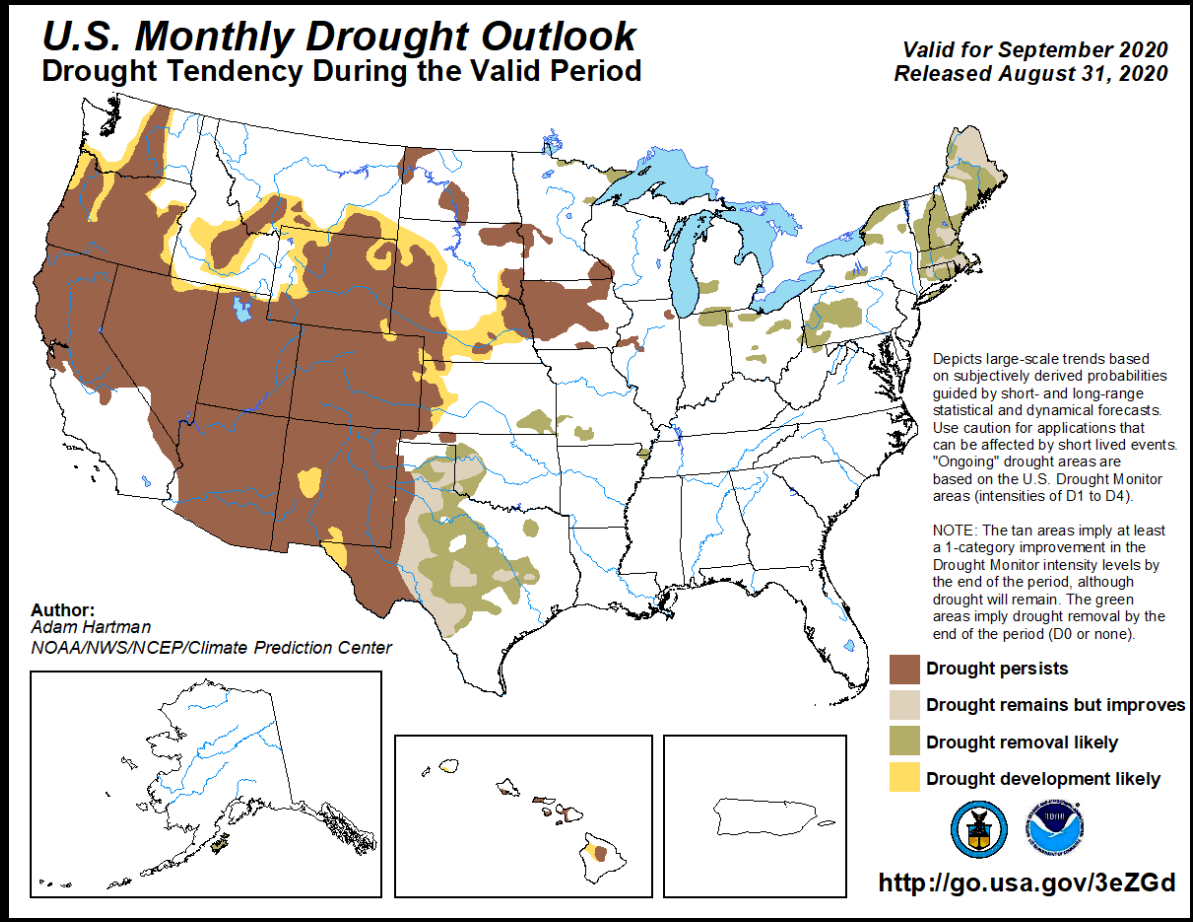
Persisting drought entrenched over much of the West, now also including parts of the Upper Midwest & High Plains.

Drought expected to improve or cease in C TX & New Eng.

Drought persists in Hawaii.



Last Month

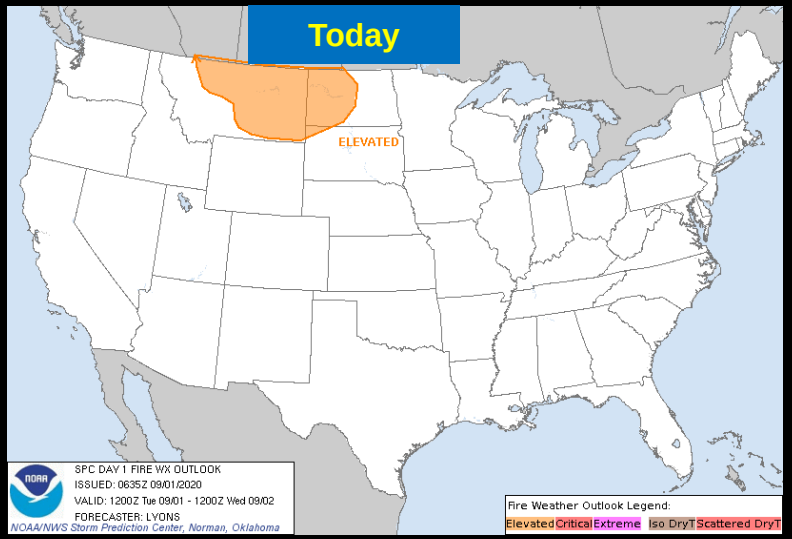


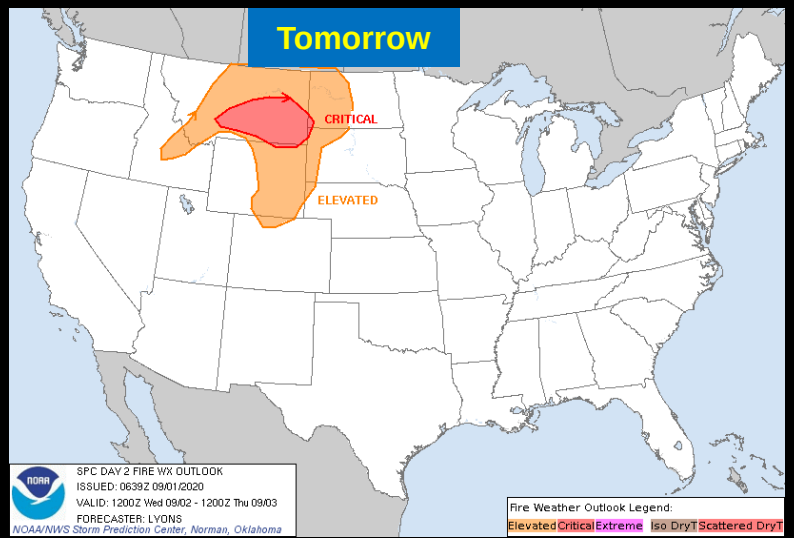
09/01/2020

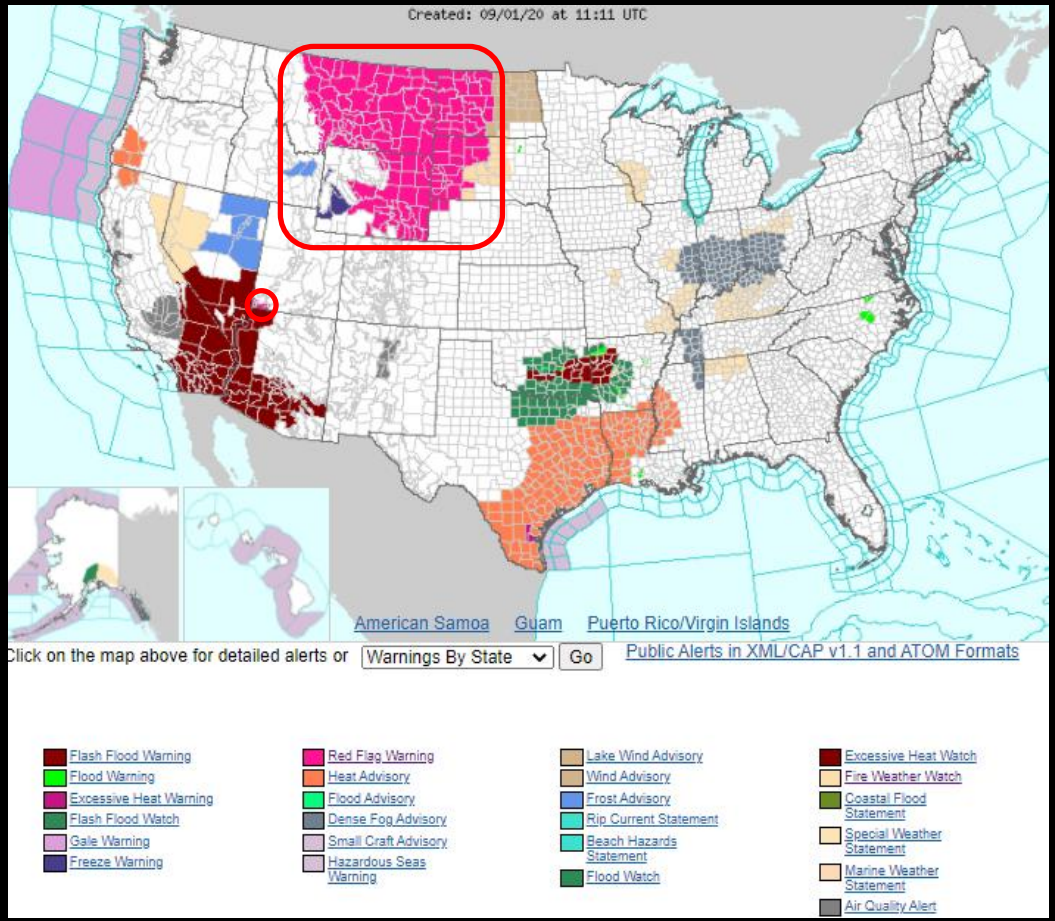
Link

Source: NWS, Climate Prediction Center.

Fire Weather Advisories







← Link

09/01/2020

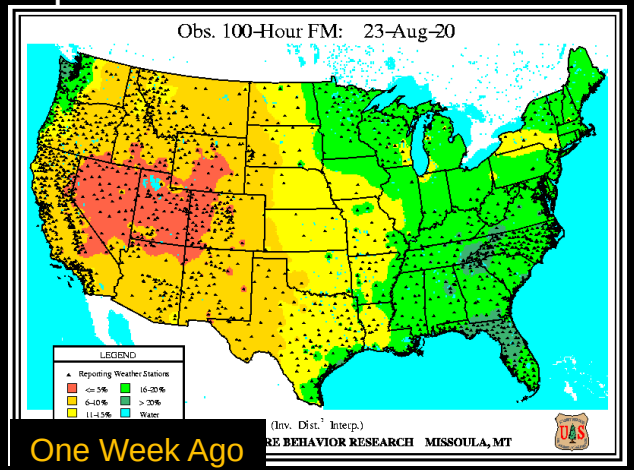
↑ Link

Sources: NWS; Storm Prediction Center

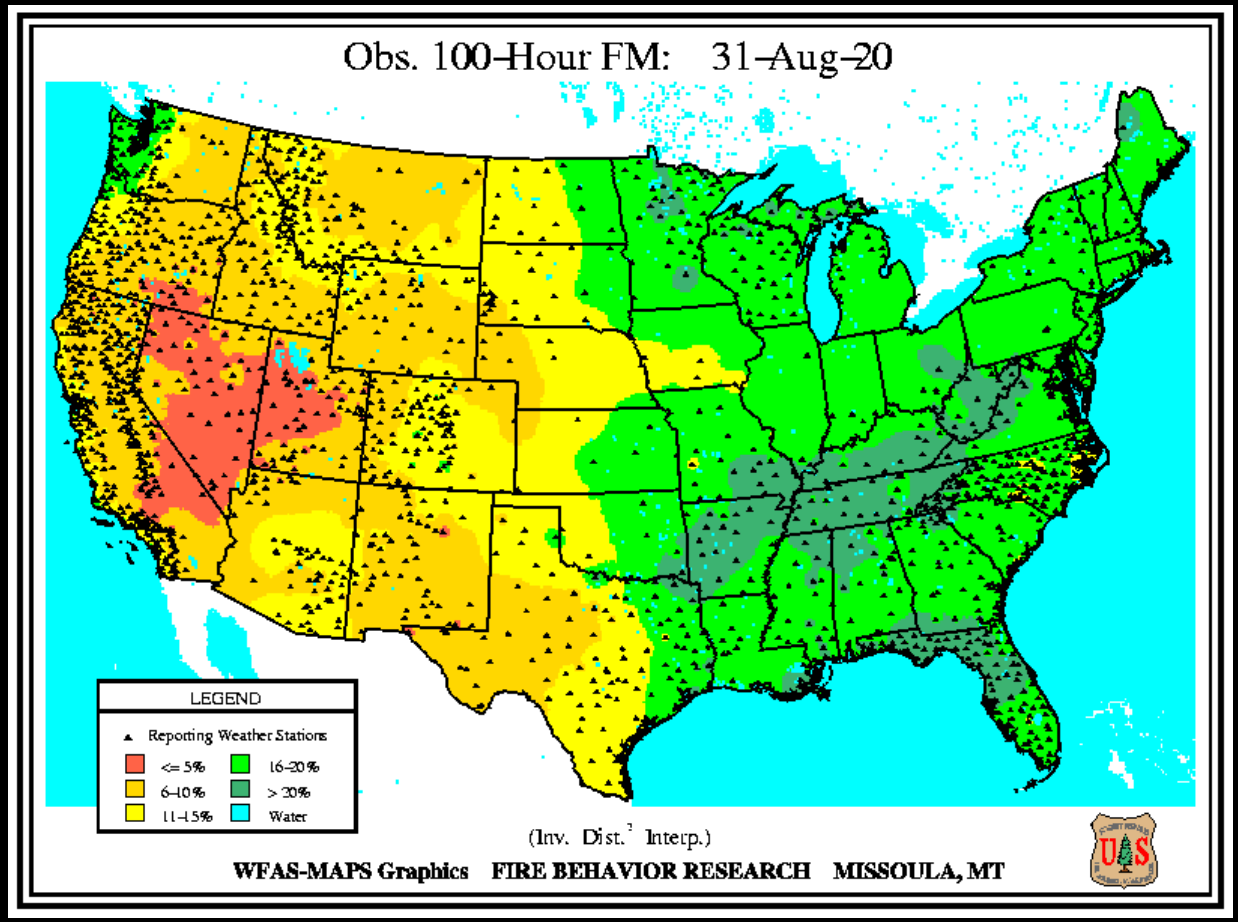
100-Hr Fuel Moisture

Across the West, conditions brought favorable change to fuel moisture in larger dead fuels, but the trend will reverse with the impending return to a long period of hot, dry weather.

Critically dry fuels will expand beyond GB to again include large parts of RM, SW, CA, & NW. Impact in NR is less certain.



One Week Ago



09/01/2020

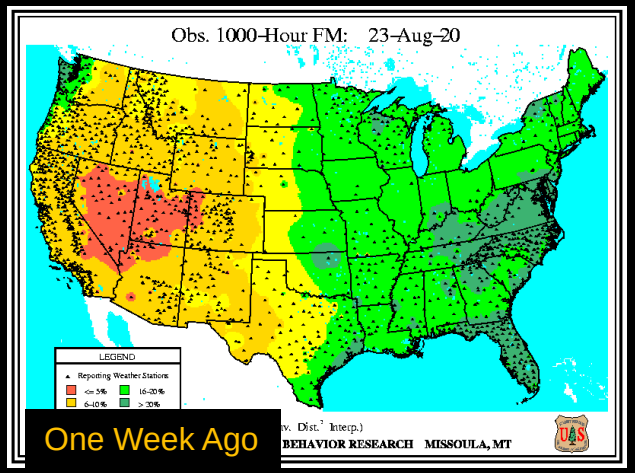
Link

Source: Wildland Fire Assessment System (WFAS).

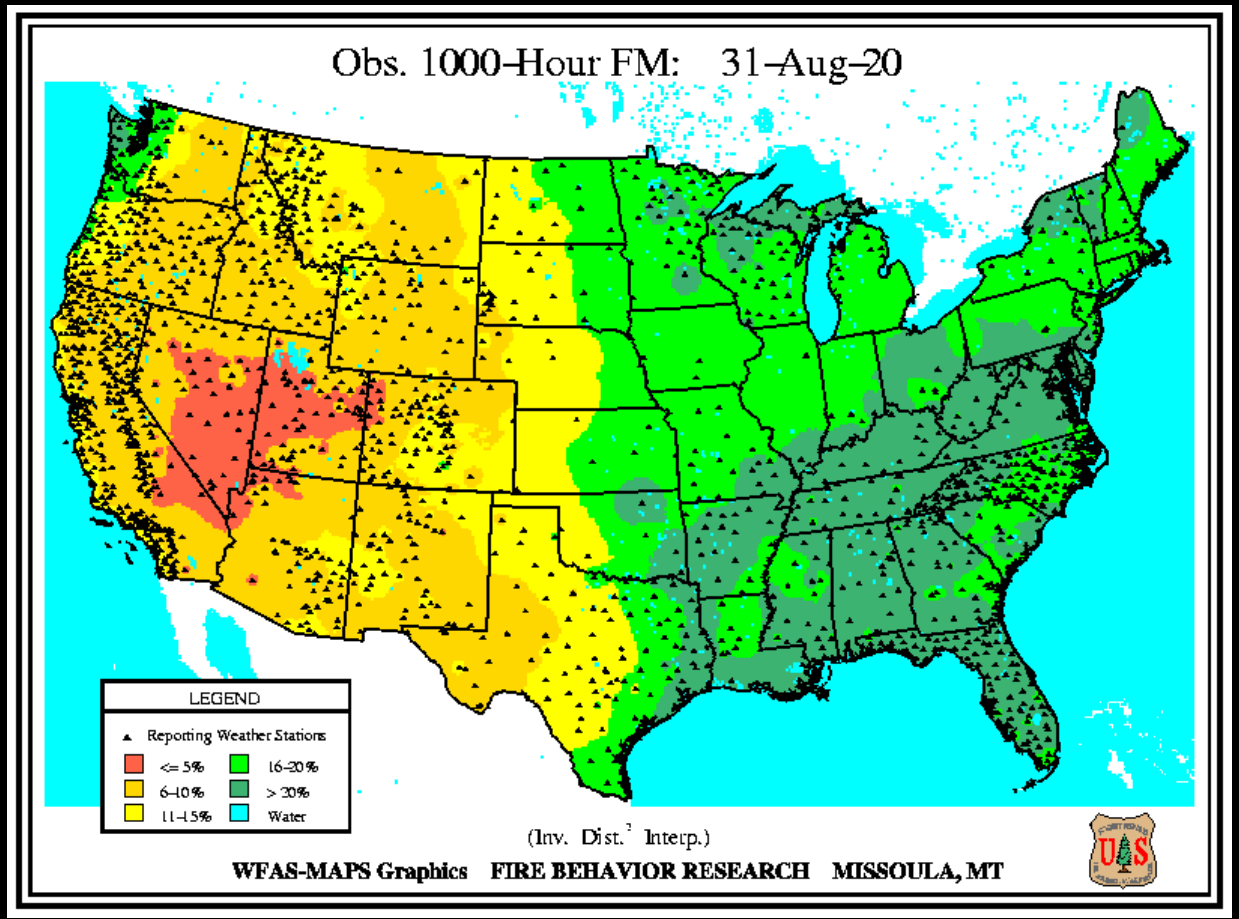
1000-Hr Fuel Moisture

Heavy dead fuel moisture shows why transition to off-peak fire danger is delayed throughout most of the West. Except for far PNW, almost all areas are ≤ 10% & expected to trend down again.

1000-hr fuels in S GB & CO West Slope remain at record low levels; saw negligible improvement.



One Week Ago



09/01/2020

Link

Source: Wildland Fire Assessment System (WFAS).

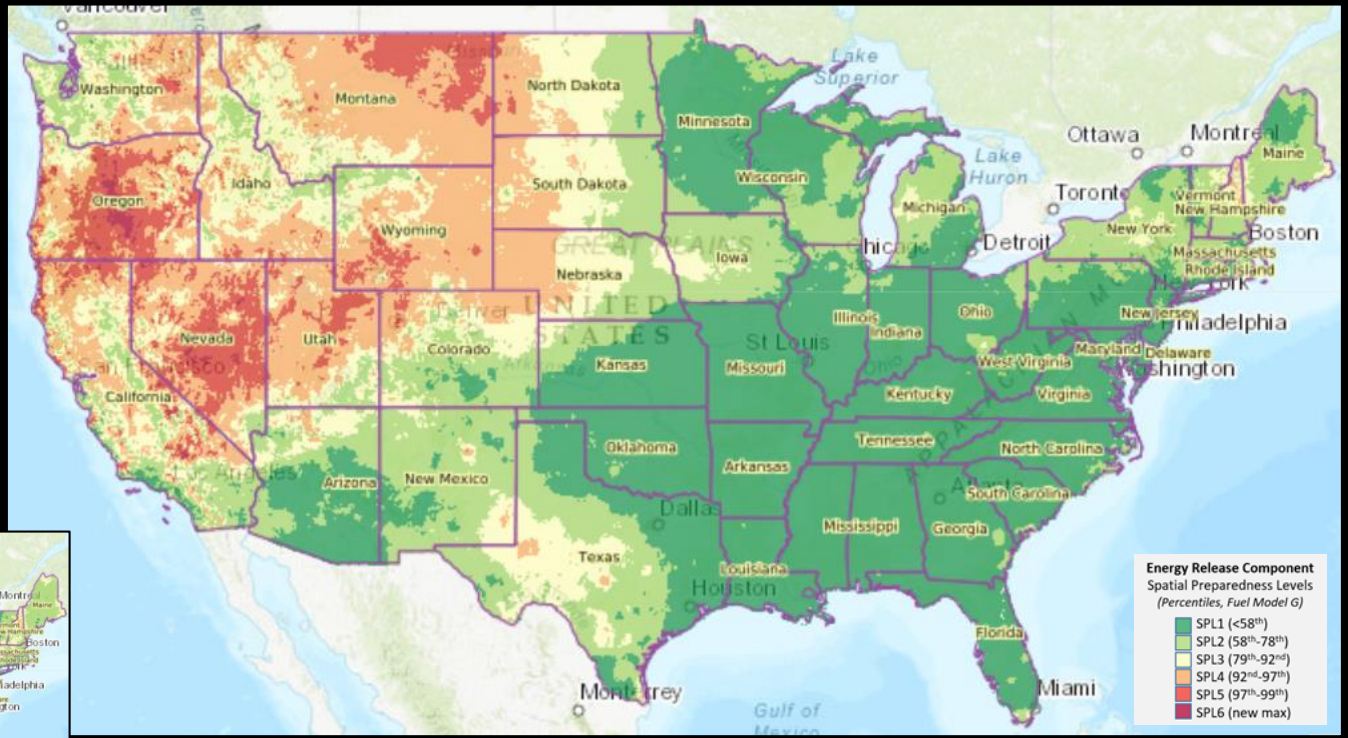
Energy Release Component

(Percentiles, Model G)

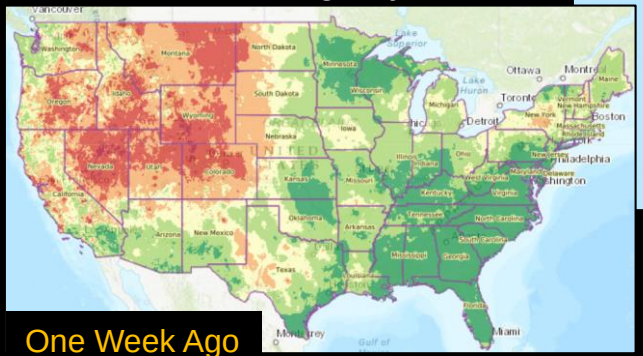
Milder conditions in the western US over the past week helped improve ERC in many areas, especially SW, RM, N GB, & NR.

Abnormally high ERC persisted across most of S GB, and the short period of static/improved ERC in NW & CA has ended. Across the West, fire danger to increase under a hot, dry pattern.

C/W TX remained elevated, but is finally expected to see some relief in the coming days.



09/01/2020



One Week Ago

Source: Wildland Fire Assessment System (WFAS). Link

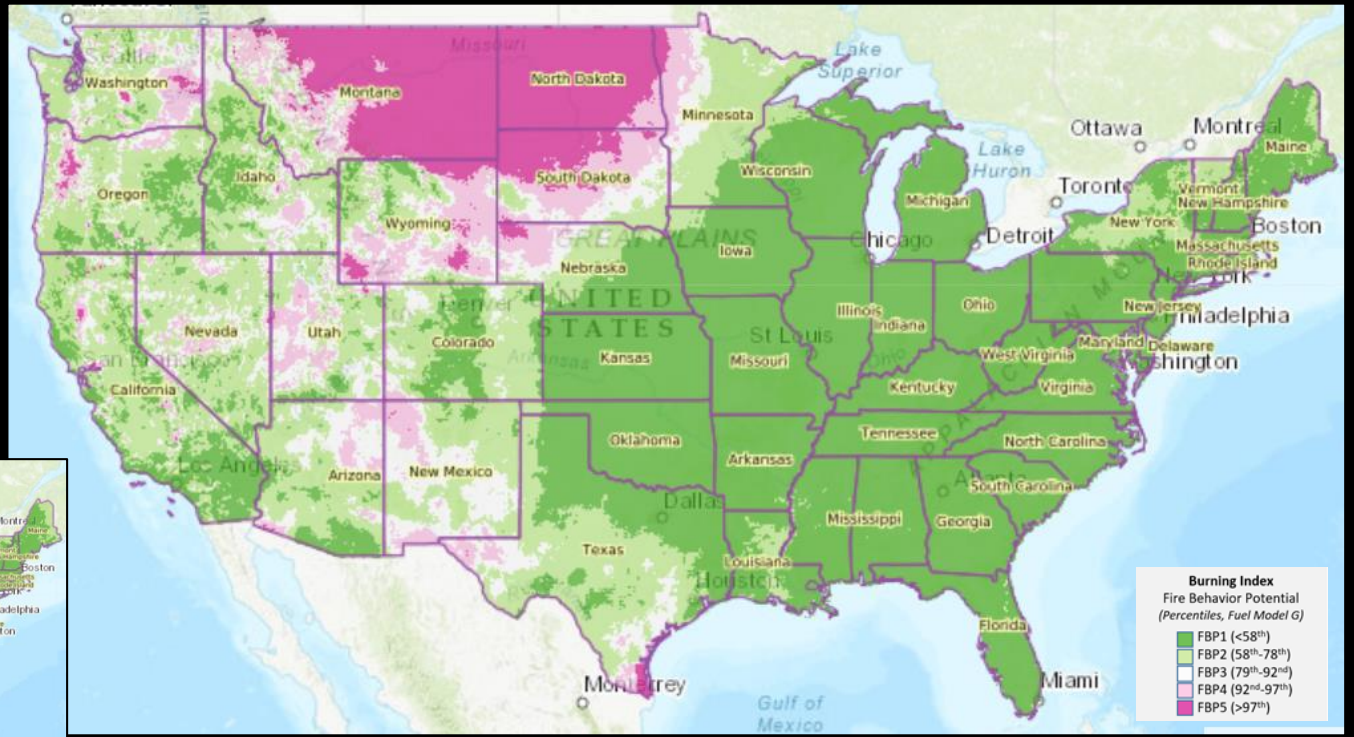
09/01/2020

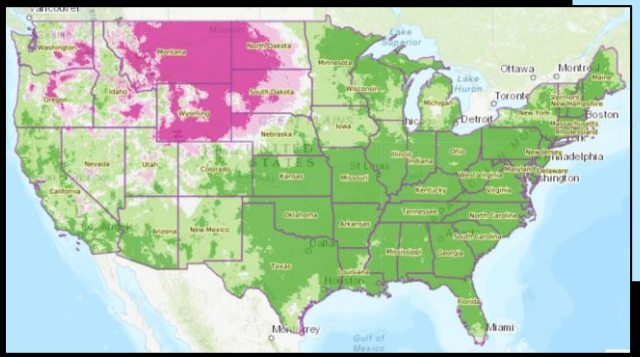
Burning Index

(Percentiles, Model G)

BI (FBP Class 5) denotes critical conditions, due to elevated ERC combined with very high winds and lower RHs, could result in challenging IA for any new fire starts in the High Plains today.

Tomorrow will see similar critical conditions, but expanded to the west and south. Existing fires in ID, MT, & WY (poss. even OR & WA) will have control lines tested and surely be busy with any point protection efforts.





Tomorrow's BI

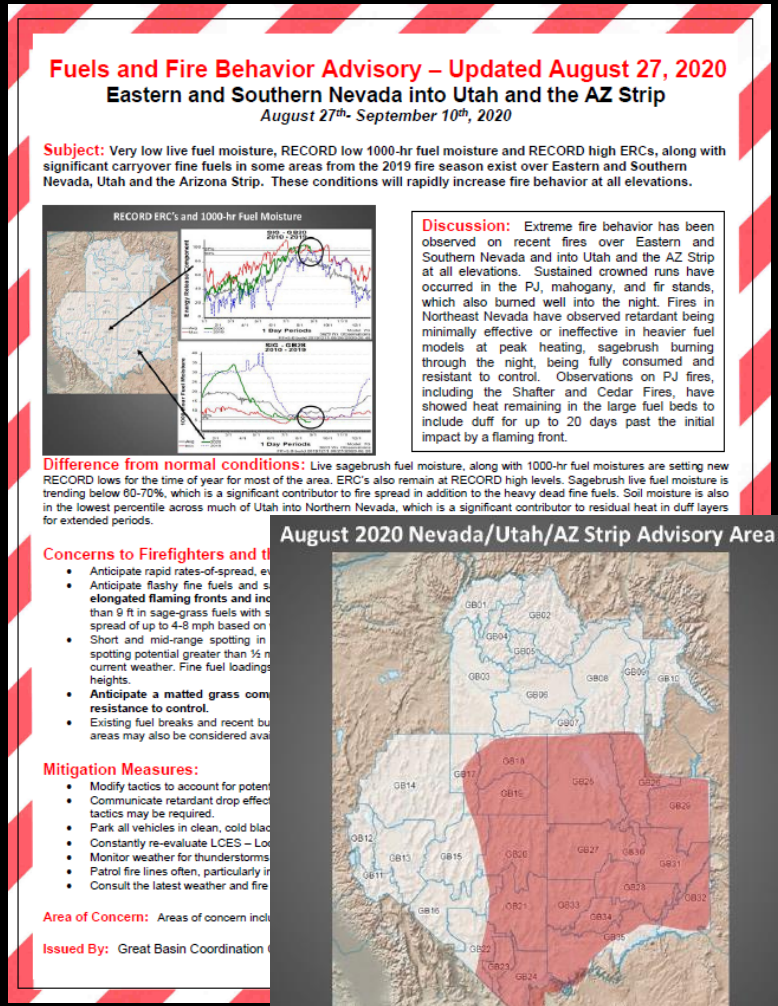
Link

Source: Wildland Fire Assessment System (WFAS).

Fuels and Fire Behavior Advisory 09/01/2020
E/S NV, W UT, AZ Strip

Revalidated on 8/27, as conditions and affected area remain unchanged from prior issuance.

- Critically dry live and dead fuel moisture
  - Record low 100-hr & 1000-hr dead fuels
  - Abnormally dry shrub fuels (e.g. sagebrush <60%)
- Heavy fine fuel loading (200%+); carry-over fuels
- Continuous fuel bed
- Rapid ROS & spotting
- Ineffective fuel breaks, including burn scars
- Reduced retardant effectiveness
- Active burning at night
- Heat retention in large fuels & duff up to 20 days after ignition



Fuels and Fire Behavior Advisory – Updated August 27, 2020

Eastern and Southern Nevada into Utah and the AZ Strip

August 27th- September 10th, 2020

Subject: Very low live fuel moisture, RECORD low 1000-hr fuel moisture and RECORD high ERCs, along with significant carryover fine fuels in some areas from the 2019 fire season exist over Eastern and Southern Nevada, Utah and the Arizona Strip. These conditions will rapidly increase fire behavior at all elevations.

RECORD ERC's and 1000-hr Fuel Moisture

Discussion: Extreme fire behavior has been observed on recent fires over Eastern and Southern Nevada and into Utah and the AZ Strip at all elevations. Sustained crowned runs have occurred in the PJ, mahogany, and fir stands, which also burned well into the night. Fires in Northeast Nevada have observed retardant being minimally effective or ineffective in heavier fuel models at peak heating, sagebrush burning through the night, being fully consumed and resistant to control. Observations on PJ fires, including the Shafter and Cedar Fires, have showed heat remaining in the large fuel beds to include duff for up to 20 days past the initial impact by a flaming front.

Difference from normal conditions: Live sagebrush fuel moisture, along with 1000-hr fuel moistures are setting new RECORD lows for the time of year for most of the area. ERC's also remain at RECORD high levels. Sagebrush live fuel moisture is trending below 60-70%, which is a significant contributor to fire spread in addition to the heavy dead fine fuels. Soil moisture is also in the lowest percentile across much of Utah into Northern Nevada, which is a significant contributor to residual heat in duff layers for extended periods.

Concerns to Firefighters and t

- Anticipate rapid rates-of-spread, e
- Anticipate flashy fine fuels and s **elongated flaming fronts and inc** than 9 ft in sage-grass fuels with s spread of up to 4-8 mph based on
- Short and mid-range spotting in spotting potential greater than ½ n current weather. Fine fuel loadings heights.
- **Anticipate a matted grass com resistance to control.**
- Existing fuel breaks and recent bu areas may also be considered ava

Mitigation Measures:

- Modify tactics to account for potent
- Communicate retardant drop effec tactics may be required.
- Park all vehicles in clean, cold blac
- Constantly re-evaluate LCES – Lo
- Monitor weather for thunderstorms
- Patrol fire lines often, particularly ir
- Consult the latest weather and fire

Area of Concern: Areas of concern incl

Issued By: Great Basin Coordination

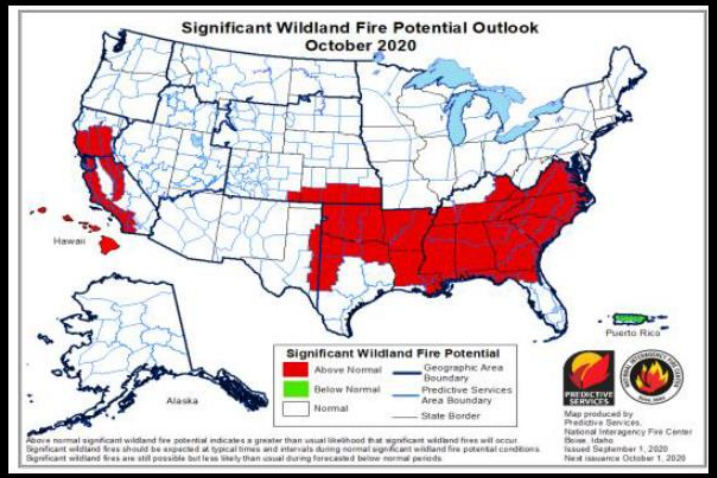
August 2020 Nevada/Utah/AZ Strip Advisory Area

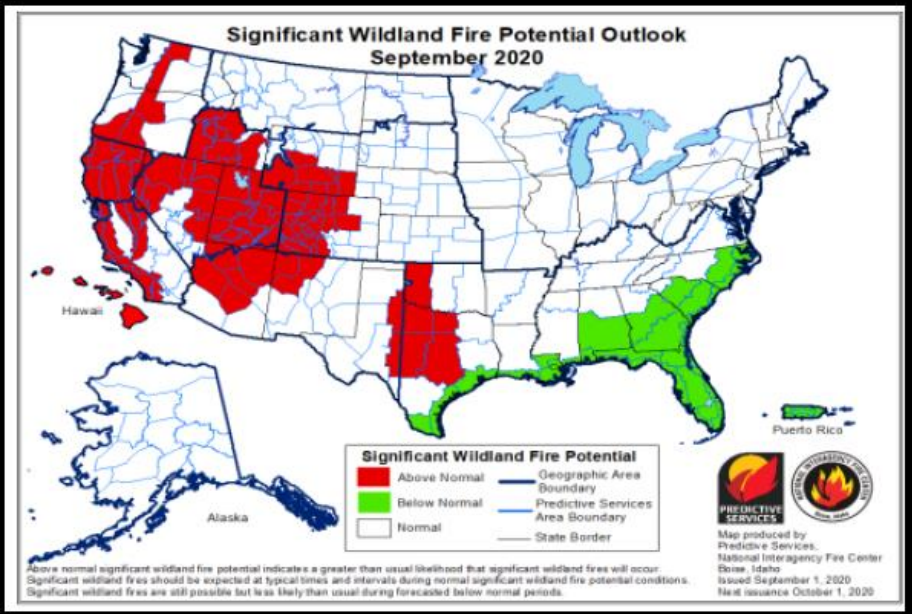
↑ Link

Significant Fire Potential Outlook

New 4-month Outlook has been issued.

Recent (& current – e.g. RM, SW) improvements to fire danger conditions in the West will not be sustained. Most of September will be relatively hot & dry. Fire danger will remain elevated, possibly worsen.





Fire season will be abnormally long, extending into September, for large parts of SW, RM, & GB. Potential that has been building steadily in NW will keep fire potential high in SW OR & east of the Cascades.

CA continues to anticipate a busy fall season (note HI too). Activity could be widespread across SA in October and beyond.

09/01/2020

Link

Fuels & Fire Danger Summary

09/01/2020

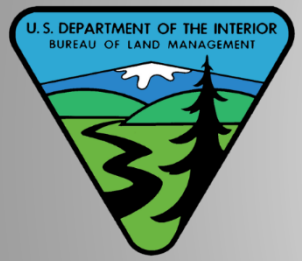
- Main threat: Critical fire weather across E MT & W Dakotas today, expanding tomorrow to include C ID, C MT, & E WY is the short-term concern, followed by hot, dry conditions across most of the West under a long-lasting ridge.
- RM & SW: Brief resurgence of monsoonal moisture fell short of providing the hoped-for pivot to more typical (lesser) late summer fire potential.
- NR: Outlook is less certain than the other GAs. Cool, possibly wet, weather in early Sept might provide enough slowing to keep fire potential from rising to above normal levels. Day length becoming a (positive) factor.
- NW & CA: Expect fire danger to resume (CA) or elevate (NW) to abnormally high levels. Fortunately, no significant lightning events are expected.
- Unlike normal seasonal transitions that occur in several areas around this time of year, significant fire potential will persist in all western Geographic Areas (except AK, poss. NR) until mid-September and possibly beyond.

9 GEOGRAPHIC AREAS & 10 COORDINATION CENTERS

Alaska Area (AK)
California Area (CA)
- North Ops (NOps, ONC)
- South Ops (SOps, OSC)

Eastern Area (EA)
Great Basin Area (GB)
Northern Rockies Area (NR)
Northwest Area (NW)
Rocky Mountain Area (RM)
Southern Area (SA)
Southwest Area (SW)

PARTNERING AGENCIES



Comments or questions?

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Predictive Services Staff